

REMARKS

Claims 16, 18-25, and 27-32 were previously pending in the application. This Amendment amends claims 18 and 20. Claims 16, 19, 21-25 and 27 - 32 remain unchanged. Claim 16 is independent.

Entry of this Amendment is proper because it does not raise any new issues requiring further search by the Examiner, narrows the issues on appeal, and is believed to place the present application in condition for immediate allowance.

The Claim Objections

The Office Action objects to claims 18 and 20 because of informalities. This Amendment amends claims 18 and 20 to correct the informalities, thereby obviating these objections.

Applicants respectfully request withdrawal of this objection.

The Claimed Invention

An exemplary embodiment of the claimed invention, as recited by, for example, independent claim 16, is directed to a refrigerating appliance comprising an internal lighting system including at least one organic light-emitting diode (OLED) wherein said OLED is supported in said housing for forming a luminous surface from at least one of said internal walls and a built-in component

located in said interior space, said OLED being integrated into at least one of said internal walls and a surface of said built-in component.

Conventional refrigeration appliances, such as the refrigerator of the Rogers reference applied in the present Office Action, include incandescent lamp lighting systems. In such conventional devices, large parts of the interior of the refrigerator can be inadequately lighted due to the light from the lighting system being blocked, for example, by built-in components and food in the refrigerator. Such conventional incandescent lamp lighting systems commonly are too large and bulky to install throughout the refrigerator compartment to improve the lighting.

In stark contrast, the present invention provides an OLED being integrated into at least one of said internal walls and a surface of said built-in component. In this manner, the present invention provides an internal lighting system for an appliance that can provide uniform lighting of the interior while occupying little space.

The Rejections under 35 U.S.C. § 103

In the Office Action, claims 16, 18, 20-25, 27-30 and 32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Rogers reference (US 6,059,420) in view of the Avenwedde et al. reference (US 7,107,779 B2) and the Chen reference (US 2003/0042852 A1). Claim 19 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Rogers reference, the Avenwedde et al.

reference, the Chen reference, and further in view of the Lange et al. reference (US 6,478,445 B1). Claim 31 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Rogers reference, the Avenwedde et al. reference, the Chen reference and further in view of the Caldwell reference (US 200310122455 A1).

Applicant respectfully traverses these rejections.

Applicant respectfully submits that none of the applied references discloses or suggests the features of the claimed invention including a refrigerating appliance comprising an internal lighting system including at least one organic light-emitting diode (OLED) wherein said OLED is supported in said housing for forming a luminous surface from at least one of said internal walls and a built-in component located in said interior space, said OLED being integrated into at least one of said internal walls and a surface of said built-in component, as recited in independent claim 16.

As explained above, these features are important for providing an internal lighting system for an appliance that can provide uniform lighting of the interior while occupying little space.

The Rogers reference very clearly does not teach or suggest these features. Indeed, the Office Action specifically acknowledges that the Rogers reference lacks the teaching of the lighting system of the refrigerating appliance is integrated into an internal wall and surface of a built-in component, as recited in claim 16.

However, the Office Action takes the position that it would have been obvious to integrate the light source of Rogers within the housing walls and of the refrigerating appliance since it has been held that forming in one piece a structure which has formerly been formed in two, or more pieces, involves only routine skill in the art. The Office Action states that the motivation for doing so would be because integrating the light source within the housing of the appliance would yield a desired illumination emitting from the appliance so that someone opening the appliance would have ample illumination to observe what is inside of the appliance.

Contrary to the assertions in the Office Action, Applicant respectfully submits that the alleged combination of the Rogers reference to integrate an OLED into at least one of the internal walls and a surface of the built-in component very clearly would not be merely an obvious matter of engineering choice involving only routine skill in the art. Moreover, one of ordinary skill in the art would not have had an apparent reason to modify the disclosure of the Rogers reference to integrate the light source into at least one of the internal walls and a surface of the built-in component, and then to combine the same with the disclosures of the Avenwedde et al. reference and the Chen reference to arrive at the claimed invention as a whole. Furthermore, the Office Action does not establish an adequate rationale for making such a combination.

First, Applicants note that, if the Applicant has demonstrated the criticality of a specific limitation, it would not be appropriate to rely solely on case law as the rationale to support an obviousness rejection. M.P.E.P. § 2144.04.

In the instant application, Applicant very clearly has demonstrated the criticality of the OLED being integrated into at least one of the internal walls and a surface of the built-in component to provide uniform lighting of the interior while occupying little space.

Applicant has demonstrated the criticality of these limitations, and therefore, it is not appropriate to rely solely on case law as the rationale to support these features.

Second, Applicant respectfully submits that the claimed invention very clearly perceived the need for an internal lighting system for an appliance that can provide uniform lighting of the interior while occupying little space, showing insight that was contrary to the understandings and expectations of the art, and particularly, contrary to the teachings of the Rogers reference.

The Rogers reference is directed to a refrigerator door that converts the door of the refrigerator from a mirrored finish to a virtually transparent finish. See col. 1, lines 56-59. In the Rogers reference, the door panel 11 includes a transparent panel 22 and a so-called two-way mirror panel 24 juxtaposed therewith. An internal lighting unit 12 is disposed within the door structure. See col. 2, lines 38-46.

In the Rogers reference, when the lighting unit 12 is off, the door appears mirrored, and when the lighting unit 12 is illuminated, the mirror is rendered transparent, thereby revealing the contents of the refrigerator. See col. 3, lines 13-18.

The Rogers reference very clearly perceived a need for a plurality of high intensity lights 30 which are disposed around the interior periphery of the door framework 20, in order to covert the door of the refrigerator from a mirrored finish to a virtually transparent finish. As shown in FIG. 5, these high intensity lights surround the periphery of the entire door and occupy large volumes of space inside the refrigerator.

Moreover, the Rogers reference very clearly teaches the need for concentrating all of the light sources in the door at the front of the refrigerator in order to covert the door of the refrigerator from a mirrored finish to a virtually transparent finish. As a result, the built-in components and food in the refrigerator of the Rogers reference would block the light projecting from the light sources in the door. Therefore, the Rogers reference would suffer from the very same problems of the conventional art described in the present application.

In stark contrast, the claimed invention perceived the need for an internal lighting system for an appliance that can provide uniform lighting of the interior while occupying little space, which shows insight that very clearly was contrary to the understandings and expectations of the prior art, and particularly, to the Rogers reference.

When properly considered as a whole, the features of claim 16 very clearly do not flow logically from the teachings of a lighting system for converting the door of the refrigerator from a mirrored finish to a virtually transparent finish, as explained in the Rogers reference.

The Avenwedde et al. reference, the Chen reference, the Lange et al. reference, and the Caldwell reference do not remedy the deficiencies of the Rogers reference.

None of these references recognizes these problems. Moreover, these references, like the Rogers reference, very clearly would suffer from the very same problems of the conventional art described above. Indeed, the Office Action does not rely on these references for the teaching of these features.

In stark contrast to the teachings of the applied references, independent claim 16 recites a refrigerating appliance comprising an internal lighting system including at least one organic light-emitting diode (OLED) wherein said OLED is supported in said housing for forming a luminous surface from at least one of said internal walls and a built-in component located in said interior space, said OLED being integrated into at least one of said internal walls and a surface of said built-in component.

As explained above, these features are important for providing an internal lighting system for an appliance that can provide uniform lighting of the interior while occupying little space.

None of the applied references discloses or suggests the subject matter defined by independent claim 16.

Applicants respectfully request withdrawal of these rejections.

CONCLUSION

In view of the above, entry of the present Amendment and allowance of claims 16, 18-25, and 27-32 are respectfully requested. If the Examiner has any questions regarding this amendment, the Examiner is requested to contact the undersigned. If an extension of time for this paper is required, petition for extension is herewith made.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'J. Howard', written in a cursive style.

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